

REMARKS

By this amendment, claims 1, 4-12 have been cancelled. Claims 13, 15 and 16 were amended. Claims 22 and 23 were added. Claims 2, 3, 14 and 18 were previously canceled.

Claims 13, 15-17 and 19-23 remain pending in the application. Reconsideration and allowance of all of the claims is respectfully requested in view of the foregoing amendments and the following remarks.

In regard to Rejection of Claims 1, 4-5, 7, 9, 11 and 12 under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1, 4-5, 7, 9, 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Obata, Japanese patent document JP 2000-003705, in view of Emori, Japanese patent document JP 55-112114, and further in view of Coe, U.S. Patent No. 1,895,607.

Claims 1, 4-12 were cancelled. The rejection is therefore moot.

In regard to Rejection of Claims 6, 13, 15-17 and 19 under 35 U.S.C. § 103(a)

The Examiner has rejected claims 6, 13, 15-17 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Obata in view of Emori and Coe further in view of Diolot. The Applicants believe that the Examiner's rejections of claims 13, 15-17 and 19 have been addressed and overcome by the present amendment.

Claim 6 was cancelled. The rejection is therefore moot.

By the present amendment, claim 13 has been amended and now recites the limitation that :

[...] the pair of working rollers having end portions and a generally convex curvilinear cylindrical shape including a flat central portion; the meeting surfaces of the flat central portions of the pair of working rollers defining a lamination surface [...]

Support for this amendment is found in paragraphs [0054], [0055], and [0056] of the specification.

[0054] ... working rollers 19a and 19b are curvilinear cylinders. working rollers 19a and 19b have slightly convex profiles such that the meeting surfaces 80 of the rollers defined (sic) a lamination segment 82.

[0055] ...no lateral force is applied to the supporting members 54 and 56 of the working rollers 19a and 19b. lamination segment 82 therefore remains perfectly flat and even.

[0056]...the convex profiles of the working rollers 19a and 19b facilitates their bending by providing free zones 84 where the end portions of the working rollers 19a and 19b may freely recede to bend the central portion of the lamination segment 82 as desired.

At least the above feature of claim 13 as amended is not taught by Obata or Emori, or Coe, alone or in combination, which combination is not admitted.

Coe teaches work rolls 10 having a convex surface in the longitudinal direction to compensate the deflection of the work roll under the pressure of rolling the metal strips or sheets.

Referring to the Figure, Coe states in Col. 2 lines 54-59, that : “With this shape of roll, the curvature compensates for the deflection caused by the pressure on the metal strip being rolled and flat strips or sheets, or that is, strips or sheets of uniform thickness, can be produced with these rolls.”

As illustrated in the Figure of Coe, the work rolls 10 do not present a flat central portion as defined in amended claim 13. Furthermore, since Coe does not provide for bending of the work rolls 10 and in fact, prevents any deformation of the work rolls 10 with back rolls 11 having a concave profile, the curvature of the work rolls must be continuous in order to provide a uniform compensation of the deflection caused by the pressure on the metal strip being rolled.

Therefore, at least one feature of claim 13 as amended is not taught by Obata, Emori or Coe, alone or in combination, which combination is denied.

This deficiency in Obata and Emori and Coe is not remedied by Diolot. Diolot discloses work rolls that are flat throughout their lengths.

As such, the Examiner is requested to withdraw his rejection of claim 13 and claims 15-17 and 19 depending therefrom.

In regard to Rejections of Claim 8 under 35 U.S.C. § 103(a)

The Examiner has rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Obata in view of Emori and Coe, and further in view of Martt, U.S. Patent No. 4,179,913.

Claim 8 was cancelled. The rejection is therefore moot.

In regard to Rejections of Claim 20 under 35 U.S.C. § 103(a)

The Examiner has rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Obata in view of Emori and Coe, Diolot and further in view of Martt, U.S. Patent No. 4,179,913. The Applicants believe that the Examiner's rejection has been addressed and overcome by the present amendment.

The Examiner's attention is directed to the following feature of claim 13:

[...] the pair of working rollers having end portions and a generally convex curvilinear cylindrical shape including a flat central portion; the meeting surfaces of the flat central portions of the pair of working rollers defining a lamination surface [...]

As previously discussed, at least the above feature of claim 13 is not taught by Obata or Emori, Coe or Diolot alone or in combination, which combination is not admitted.

This deficiency in Obata, Emori, Coe or Diolot is not remedied by Martt, without admitting that Martt can be combined with Obata or Emori and reserving the right to argue thereagainst in the future.

Referring to the title of Martt, Martt relates to a “metal strip tensioning apparatus for use in continuous strip reduction cold mill and method”.

Referring also to lines 13-16 of column 4 of Martt,

The successive mill stands of the mill are each indicated generally at 37, 38, 39, 40 and 41 respectively, these mill stands each being made up of the usual work rolls and back up rolls.

Martt makes no mention of any aspects of the construction of the mill stands 37, 38, 39, 40, 41. It is apparent that Martt teaches no particular construction of the mill stands, and by extension Martt teaches no particular construction of the work rolls thereof. Therefore, Martt does not teach a pair of working rollers each having a generally convex curvilinear cylindrical shape including a flat central portion.

Therefore, at least one feature of claim 13 is not taught by Obata, Emori, Coe, Diolot and Martt, alone or in combination, which combination is not admitted. As such, the Examiner is requested to withdraw his rejection of claim 20 depending from claim 13.

In regard to Rejections of Claims 9 and 10 under 35 U.S.C. § 103(a)

The Examiner has rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Obata in view of Emori and Coe, and further in view of Davenport, International patent publication No. WO 01/97989.

Claims 9 and 10 were cancelled. The rejection is therefore moot.

In regard to Rejections of Claim 21 under 35 U.S.C. § 103(a)

The Examiner has rejected claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Obata in view of Emori and Coe, and further in view of Rudolph, U.S. Patent No.

4,934,306. The Applicants believe that the Examiner's rejection has been addressed and overcome by the present amendment.

The Examiner's attention is directed to the following feature of claim 13:

[...] the pair of working rollers having end portions and a generally convex curvilinear cylindrical shape including a flat central portion; the meeting surfaces of the flat central portions of the pair of working rollers defining a lamination surface [...]

As previously discussed, at least the above feature of claim 13 is not taught by Obata, Emori, or Coe alone or in combination, which combination is not admitted.

This deficiency in Obata, Emori and Coe is not remedied by Rudolph, without admitting that Rudolph can be combined with Obata or Emori and reserving the right to argue thereagainst in the future.

Referring to lines 33-68 of column 8 of Rudolph,

FIG. 7 illustrates diagrammatically the apparatus and method for impregnating the thin film of substrate material with organic material according to the present invention. [...] The impregnated substrate material 150 subsequently can be withdrawn from reel 174 and cut to desired shapes for pressing onto lithium anodes.

It is apparent that Rudolph teaches impregnating a glass substrate 150 with the organic material polyvinyl chloride, and later pressing the impregnated substrate material 150 onto lithium anodes to form coated anodes. Rudolph makes no mention of how the lithium anodes are formed. By extension, Rudolph does not teach passing a sheet of lithium or lithium alloy between the meeting surfaces of a pair of working rollers of any shape. In addition, Rudolph makes no mention of the construction of any of the rollers used for impregnating the substrate material 150. Therefore, Rudolph does not teach a pair of working rollers each having a generally convex curvilinear cylindrical shape including a flat central portion..

Therefore, at least one feature of claim 13 is not taught by Obata, Emori, Coe and Rudolph, alone or in combination, which combination is not admitted. As such, the Examiner is requested to withdraw his rejection of claim 21 depending from claim 13.

In view of the above remarks, the Applicant respectfully submits that all of the currently pending claims are allowable and that the entire application is in condition for allowance.

Should the Examiner believe that anything further is desirable to place the application in a better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

At the time of filing of the present response, no fees were believed to be necessary. In case any fee should be necessary, the Office is hereby authorized to debit Deposit Account number 502977.

Respectfully submitted,

/Alain Bernier/

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